

REMARKS/ARGUMENTS

Claims 1 is cancelled in this amendment. New claims 65-77 have been added.

The disclosure was objected to for three discrepancies. The amendments to the specification presented in this letter are believed to address those discrepancies.

Claim 1 was rejected under 35 USC 112, second paragraph. Applicant acknowledges that rejection. That claim has been cancelled. The rejection was for the omission of some essential structural cooperative relationships of elements. These omissions are addressed in the new claims submitted.

Claim 1 was also rejected under 35 USC 102(b) as being anticipated by any of Kearny, Loewen, or the Russian reference 693047. As mentioned, claim 1 has been cancelled. Applicant respectfully argues below that the new claims submitted are not anticipated by any of these references, nor do these references suggest the solutions described by these claims.

New independent claims 65, 71, 76 and 77 now contain limitations not taught in either Kearny, Loewen, or the Russian reference. In particular claims 65 and 71 limit the invention to having:

a fixed shaft which extends into said interior of said housing opposite said rotary shaft, the axis of said fixed shaft being fixed relative to said rotary shaft, and said fixed shaft having a spherical end portion about which said primary vane rotates;

said fixed shaft being adjustably mounted to said housing so that said fixed shaft can be rotated into various fixed positions;

a carrier ring rotatably carried on said spherical end portion of said fixed shaft, the axis of rotation of said carrier ring being oriented at an oblique angle in relation to said primary axis;

None of these limitations are evident in the three references cited in the 102(b) rejection, nor are they suggested in any way by the references.

Claim 65 also has the following additional limitation:

and wherein a controller is used that can cause said fixed shaft to be rotated to automatically control and adjust the fluid flow or capacity of the fluid machine.

Support for this aspect of the invention can be clearly found on page 31 lines 23-29 of the application [paragraph 0106 of the published application].

Similar limitations are written into the independent method claim 71. It is submitted that these limitations also are not found or suggested in the three references cited.

Independent claims 76 and 77 are apparatus claims that again read limitations into the claims that are not found or suggested in the cited references. These are:

a rotary shaft having a primary axis of rotation mounted to said housing, said primary vane being coupled to said rotary shaft so that said primary vane is rotated about said primary axis by said rotary shaft;

a fixed shaft which extends into said interior of said housing opposite said rotary shaft, said fixed shaft having a spherical end portion about which said primary vane rotates;

a carrier ring rotatably carried on said spherical end portion of said fixed shaft, the axis of rotation of said carrier ring being oriented at an oblique angle in relation to said primary axis;

In addition a particular structure of the primary vane is read into this claim:

wherein said primary vane is formed and connected as two halves each having a flat inner surface that abuts sealingly against the inner surface of the other half and are joined at opposite ends to define a central circular opening.

Support for this limitation is found on page 13 lines 17-26 [in paragraph 0057 in published application].

Claim 77 is almost identical to claim 76 but with a particular structure of the secondary vane as a limitation.

It is submitted that the application require no further searching, and is in condition for allowance following and responding to the issues raised in the first office action. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BY Michael A. Ervin
Michael A. Ervin
Reg. No. 45,711
Phone 512-329-6085

CERTIFICATE OF MAILING 37 CFR 1.10

I certify that this correspondence is deposited, on the date set below, with the United States Postal Service as Express Mail under the mailing label set forth below, and addressed to:

Commissioner for Patents
PO Box 1450
U. S. Patent & Trademark Office
Alexandria VA 22313-1450

Michael A. Ervin 11/10/03
Michael A. Ervin
Registry Number 45,711

Express Mail Number
EU826890408US